Appl. No.

10/756846

. :

Filed

January 13, 2004

AMENDMENTS TO THE CLAIMS

1. (Original) A method for electroless deposition of a metal onto a substrate, said substrate comprising polyimide exposed at a surface thereof, the method comprising:

electroless depositing a metal onto the substrate by applying a solution comprising a metal source, a reducing agent, an additive to adjust the pH of the solution to a predetermined value and an aromatic sulfonic acid.

- 2. (Original) A method according to claim 1, wherein the aromatic sulfonic acid comprises a sulfonic acid, an aromatic group and an apolar chain.
- 3. (Original) A method according to claim 1, further comprising exposing the surface to an anti-drag-through agent.
- 4. (Original) A method according to claim 1, the method furthermore comprising activating the substrate by applying a solution comprising a colloidal catalyst.
- 5. (Original) A method according to claim 4, wherein the colloidal catalyst includes Pd.
- 6. (Original) A method according to claim 4 wherein the colloidal catalyst includes Sn.
- 7. (Original) A method according to claim 4 wherein the colloidal catalyst is colloidal Pd/Sn.
- 8. (Original) A method according to claim 4, further comprising applying a solution comprising an accelerator.
- 9. (Original) A method according to claim 7, further comprising applying a solution comprising an accelerator.
- 10. (Original) A method according to claim 1, the method furthermore comprising a preliminary step of cleaning a surface of the substrate.
- 11. (Original) A method according to claim 1, the method furthermore comprising:

applying an anti-tarnish solution; and baking.

- 12. (Original) A method according to claim 1, wherein depositing a metal comprises depositing copper.
 - 13. (Original) A method according to claim 1, wherein the substrate is flexible.

Appl. No. : 10/756846 Filed : January 13, 2004

14. (Original) A method according to claim 1, wherein the substrate is a polyimide substrate.

- 15. (Original) A method according to claim 1, wherein the substrate comprises through holes or vias.
- 16. (Original) A plating bath for electroless deposition of a metal onto a substrate, the substrate comprising polyimide exposed at a surface thereof, the plating bath comprising a solution comprising a metal source, a reducing agent, an additive to adjust the pH of the solution to a predetermined value and an aromatic sulfonic acid.
- 17. (Original) A plating bath according to claim 16 further comprising a substrate with polyimide exposed on at least one surface for electroless deposition of the metal.
- 18. (Original) A plating bath according to claim 16, wherein the metal source is copper.
- 19. (Original) A plating according to claim 16, wherein the aromatic sulfonic acid comprises a sulfonic acid, an aromatic group and an apolar chain.
- 20. (New) A method according to claim 1, wherein the substrate comprises through holes or vias, and wherein the step of electroless depositing a metal onto the substrate comprises electroless depositing a metal onto both sides of the substrate.
- 21. (New) A plating according to claim 16, further comprising a substrate with polyimide exposed on both surfaces of the substrate for electroless deposition of the metal, wherein the substrate comprises through holes or vias.